

WHAT IS CLAIMED IS:

1. A method for detecting the presence of tumor cells in an animal suspected of having a tumor, comprising the steps of:

obtaining a sample from said animal; and
detecting expression of VEGF-B₁₈₆ from said sample,
wherein detection of expression of VEGF-B₁₈₆ is indicative of the presence of tumor cells.

2. The method of claim 1, wherein said animal is a mammal.

3. The method of claim 1, wherein said animal is a human.

4. The method of claim 1, wherein said animal is a rodent.

5. A method for detecting the presence of tumor cells in an animal suspected of having a tumor, comprising the steps of:

obtaining a sample from said animal;
measuring the expression level of VEGF-B₁₈₆ in said sample;
determining the control expression level of VEGF-B₁₈₆ in an equivalent sample from an animal not suspected of having a tumor; and
comparing said measured expression level with said control expression level,
wherein determination of an increased expression of VEGF-B₁₈₆ over the control expression is indicative of the presence of tumor cells.

6. The method of claim 5, wherein said animal is a mammal.

7. The method of claim 5, wherein said animal is a human.

8. The method of claim 5, wherein said animal is a rodent.

9. A method for detecting the presence of tumor cells in an animal suspected of having a tumor, comprising the steps of:

obtaining a sample from said animal;

determining the expression level of VEGF-B₁₈₆ in said sample;

determining the expression level of VEGF-B₁₆₇ in said sample; and

comparing said expression level of VEGF-B₁₈₆ with said expression level of VEGF-B₁₆₇,

wherein a comparison demonstrating a relative ratio of VEGF-B₁₈₆ to VEGF-B₁₆₇ greater than or equal to 28% is indicative of the presence of tumor cells.

10. The method of claim 9, wherein said animal is a mammal.

11. The method of claim 9, wherein said animal is a human.

12. The method of claim 9, wherein said animal is a rodent.

13. A method for detecting the presence of tumor cells in an animal suspected of having a tumor, comprising the steps of:

obtaining a sample from said animal;

determining the expression level of VEGF-B₁₈₆ in said sample;

determining the expression level of VEGF-B₁₆₇ in said sample; and

comparing said expression level of VEGF-B₁₈₆ with said expression level of VEGF-B₁₆₇,

wherein a comparison demonstrating a relative ratio of VEGF-B₁₈₆ to VEGF-B₁₆₇ greater than or equal to 50% is indicative of the presence of tumor cells.

14. The method of claim 13, wherein said animal is a mammal.

15. The method of claim 13, wherein said animal is a human.

16. The method of claim 13, wherein said animal is a rodent.

17. A kit for detecting the presence of tumor cells in an animal, comprising:

a receptacle adapted to receive a sample; and

a means for detecting expression of VEGF-B₁₈₆ in said sample,

whereby detection of expression of VEGF-B₁₈₆ is indicative of the presence of tumor cells.

18. A kit for detecting the presence of tumor cells in an animal, comprising:

a receptacle adapted to receive a sample;
a means for determining an expression level of VEGF-
B₁₈₆ in said sample; and
a means for comparing said expression level of VEGF-
B₁₈₆ with a control level of VEGF-B₁₈₆ in an animal absent
tumors,

wherein determination of an increased expression level of VEGF-
B₁₈₆ over the control expression level is indicative of the
presence of tumor cells.

19. A method for screening for anti-tumor agents,
comprising:

applying a test agent to a tumor cell; and
detecting, by any suitable means, a decrease in
expression of VEGF-B₁₈₆ in the tumor cell.